

Application Ser. No. 10/717,425

Reissue of Patent No. 6,318,581

Amendment dated November 17, 2005 responsive to Office Action dated October 31, 2005

Amendments to the Drawings:

The attached sheet of drawings includes changes to Fig. 4. This sheet, which replaces the original sheet including Fig. 2, has been amended to include the previously omitted reference characters 56, 120 and 112.

Attachment: Replacement Sheet with Amended Fig. 4

Remarks:

Claims 1-34 remain for consideration in this application, with claims 1, 13 and 25 being in independent format. New claims 35 and 36 have been added. In view of the claims as they now stand, the rejections of the last Action must be respectfully traversed.

5 In view of the notice that the amendment submitted October 14 was non-compliant, Applicant is resubmitting the amendment in the format prescribed by Rule 1.173. Applicant's attorney appreciates the assistance of Examiner Castellano in advising how the amendment is to be presented in reissue applications and applicant has endeavored to comply with that guidance. A marked-up copy of the claims showing the current amendments is also attached for the convenience
10 of the Examiner.

The paragraph appearing at column 3, lines 42-62 of the patent specification has been amended in two respects to conform the wording thereof to the drawings. First of all, the reference to "diameter D" has been amended to remove the "D" identifier, inasmuch as this did not appear in the drawings. In addition, in line 58 the hole defined by the margin 120 of outer wall 118 is
15 erroneously recited as being "smaller than" the opposed hole 56 in the inner wall 112. The Examiner will note that, in fact, the hole in the outer wall 118 is substantially *larger* than the opposed hole 56.

In addition, Fig. 4 has been amended to add three reference numerals, namely the hole 56 in the wall 112, the wall 112, and the hole-defining margin 120 in outer wall 118. Attached is a red-lined markup of Fig. 4, together with a file copy thereof, marked as a replacement drawing.

The minor changes made in the specification and the drawing do not, of course, introduce any new matter and improve the readability of the patent specification. Entrance of the amended specification language and drawing is therefore solicited.

5 Claims 5-7, 10-12, 17-19, 22-24 and 33-34 were rejected under Section 112 for alleged indefiniteness. Claims 5, 10, 12, 17, 22 and 24 have all been amended to overcome the asserted lack of antecedent support. Similarly, claims 33 and 34 have been amended for this same purpose. Accordingly, these rejections are now overcome.

10 A number of the claims were also rejected as anticipated by the Haumann and Wiegand references. Both of these references are similar, and disclose tank or bottle fittings having end couplers with an intermediate flexible member therebetween. It will be noted in this respect that the flexible members in the references are of constant diameter (see the boot 18 of Haumann and the sleeve 39 of Wiegand), presenting endmost openings or holes of constant diameter.

15 Independent claims 1, 13 and 25 now all recite that the claimed annular sealing member presents a pair of opposed holes, with one of the holes being of substantially greater diameter than the other of the holes. This is illustrated, e.g., in Figs. 3 and 4 wherein the sealing member 90 has a large diameter hole defined by the margin 120 and adjacent the end of the boot coupled to access opening 78, and an opposed smaller diameter hole 56 which is positioned adjacent to the outlet conduit in registry with port 54.

There is no teaching or suggestion in the art of record of providing a flexible sealing member

or boot having the claimed construction. Indeed, the references teach away from the claimed arrangement.

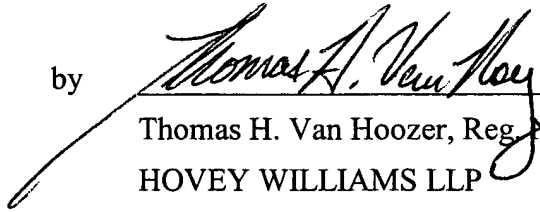
Certain of the original dependent claims have been amended to maintain consistency with the independent claims as amended. Additionally, new dependent claims 35 and 36 have also been added which depend from claim 25. Claim 35 specifically recites that the annular boot is located within the containment area. This is, of course, shown in Fig. 3, for example. Claim 36 recites that the inner and outer tank and vessel respectively have a base, an upright sidewall, and an upper end; and that the discharge outlet is located closer to the bases of the inner tank and containment vessel than the upper ends thereof. Again, this is plainly illustrated in the drawings and does not constitute new matter. This is also significant in distinguishing the art of record. If, for example, the Haumann reference bottle were turned on its side, the "discharge outlet" thereof would be precisely centered between the "base" and the "upper end." Here again, nothing in the art of record teaches this claimed combination.

Certain of the claims were also rejected under Section 103 on the basis of Haumann in view of Koma. Koma is only significant insofar as the use of a synthetic resin boot. It in no way addresses or renders obvious the construction as now claimed.

Applicant appreciates the courtesy extended to applicant's attorney and the favorable consideration given to the proposed amendment as indicated in the course of the interview conducted with Examiner Castellano on October 12, 2005. In view of the nature of the amendments made
5 herein, it is not believed that a new Declaration is required. In view of the foregoing, Applicant respectfully requests a Notice of Allowance. In the event of further questions, the Examiner is urged to call the undersigned. Any additional fee which is due in connection with this amendment should be applied against our Deposit Account No. 19-0522.

Respectfully submitted,

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by


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ATTORNEYS FOR APPLICANT

Courtesy Copy of Marked-Up Claims Identifying Changes from the Submission with the Reissue Application.

5 1. (Currently Amended) A discharge outlet for a double walled containment tank having an inner tank having a chamber for receiving liquid therein and a port for the passage of liquid therethrough, and an outer containment vessel having an access opening aligned with the port, the inner tank and the outer containment vessel defining a containment area therebetween, said discharge outlet comprising:

 a conduit fluidically coupled to the inner tank;

10 a flexible, annular sealing member positioned between the inner tank and the outer containment vessel in substantial alignment with the port and the access opening in surrounding relationship to said conduit, said sealing member presenting a pair of opposed holes, one of said holes being of substantially greater diameter than the other of said holes;

15 a first coupler for connecting said sealing member to the inner tank around the port; and
 a second coupler for connecting said sealing member to the outer containment vessel around the access opening and thereby fluidically isolating the containment area from the access opening.

20 2. (Original) A discharge outlet as set forth in claim 1, wherein said sealing member includes a circumferentially extending cup-shaped protrusion.

 3. (Original) A discharge outlet as set forth in claim 2, wherein said sealing member is a flexible synthetic resin material.

25 4. (Currently Amended) A discharge outlet as set forth in claim 3, wherein said sealing member includes a substantially flat inner wall extending radially inwardly from said protrusion and having ~~a central~~ said smaller diameter hole therein for permitting the passage of liquid therethrough.

5. (Currently Amended) A discharge outlet as set forth in claim 4, wherein said first coupler includes an inner flange positioned in the chamber and an outer flange positioned in the containment area for receiving a wall of the inner tank therebetween, each of said inner flange and intermediate outer flanges having a central opening for the passage of liquid therethrough.

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6. (Original) A discharge outlet as set forth in claim 5, wherein said conduit includes a discharge tube fluidically connected to said intermediate flange and having a length sufficient to extend exteriorly of the outer vessel.

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7. (Original) A discharge outlet as set forth in claim 6, wherein said conduit includes an inner tube fluidically connected to said inner flange.

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8. (Original) A discharge outlet as set forth in claim 3, wherein said sealing member includes a substantially flat outer wall extending radially inwardly from said protrusion and having an inner margin.

9. (Original) A discharge outlet as set forth in claim 8, wherein said inner margin is spaced outwardly from said conduit.

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10. (Currently Amended) A discharge outlet as set forth in claim 3, wherein said second coupler includes an inner flange plate ~~positioned in said channel~~.

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11. (Original) A discharge outlet as set forth in claim 10, wherein said inner flange is provided as two semi-annular flange plate halves.

12. (Currently Amended) A discharge outlet as set forth in claim 11, wherein said second coupler includes an outer flange plate ~~and positioned relatively exteriorly of said flat outer wall~~.

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13. (Currently Amended) A double walled containment tank assembly comprising:
an inner tank having a chamber for receiving liquid therein and a port for the passage of
liquid therethrough;

an outer containment vessel having an access opening aligned with the port, the inner
tank and the outer containment vessel defining a containment area therebetween;
and

a discharge outlet, said discharge outlet including:

a conduit fluidically coupled to said inner tank;

a flexible, annular sealing member positioned between said inner tank and said outer
containment vessel in substantial alignment with said port and said access opening
in surrounding relationship to said conduit, said sealing member presenting a pair
of opposed holes, one of said holes being of substantially greater diameter than
the other of said holes;

a first coupler for connecting said sealing member to said inner tank around said port; and

a second coupler for connecting said sealing member to said outer containment vessel
around said access opening and thereby fluidically isolating said containment area
from said access opening.

14. (Original) A containment tank as set forth in claim 13, wherein said sealing
member includes a circumferentially extending cup-shaped protrusion.

15. (Original) A containment tank as set forth in claim 14, wherein said sealing
member is a flexible synthetic resin material.

16. (Currently Amended) A containment tank as set forth in claim 15, wherein said
sealing member includes a substantially flat inner wall extending radially inwardly from said
protrusion and having ~~a central~~ said smaller diameter hole therein for permitting the passage of
liquid therethrough.

17. (Currently Amended) A containment tank as set forth in claim 16, wherein said
first coupler includes an inner flange positioned in said chamber and an outer flange positioned in
the containment area for receiving a wall of said inner tank therebetween, each of said inner

flange and ~~intermediate~~ outer flanges having a central opening for the passage of liquid therethrough.

5 18. (Original) A containment tank as set forth in claim 17, wherein said conduit includes a discharge tube fluidically connected to said intermediate flange and having a length sufficient to extend exteriorly of said outer vessel.

10 19. (Original) A containment tank as set forth in claim 18, wherein said conduit includes an inner tube fluidically connected to said inner flange and extending into said chamber adjacent a bottom wall of said inner tank.

15 20. (Original) A containment tank as set forth in claim 15, wherein said sealing member includes a substantially flat outer wall extending radially inwardly from said protrusion and having an inner margin, said outer wall being positioned proximate said outer vessel.

 21. (Original) A containment tank as set forth in claim 20, wherein said inner margin is spaced outwardly from said conduit.

20 22. (Currently Amended) A containment tank as set forth in claim 15, wherein said second coupler includes an inner flange plate ~~positioned in said channel~~.

 23. (Original) A containment tank as set forth in claim 22, wherein said inner flange is provided as two semi-annular flange plate halves.

25 24. (Currently Amended) A containment tank as set forth in claim 23, wherein said second coupler includes an outer flange plate ~~and positioned relatively exteriorly of said flat outer wall and proximate said outer vessel~~.

30 25. (Currently Amended) A discharge outlet for a double walled containment tank having an inner tank provided with a chamber for receiving liquid therein and having a side wall

provided with a port therein for passage of liquid therethrough, and an outer containment vessel having a wall portion provided with an access opening having a predetermined area and positioned generally across from the port in the side wall of the inner tank, the inner tank and the outer containment vessel defining a containment area therebetween, said discharge outlet comprising:

a conduit coupled to the port in the side wall of the inner tank for fluidic communication of the conduit with the inner tank;

said conduit extending through the access opening in the outer containment vessel;

a flexible annular boot member positioned in surrounding relationship to the conduit and having opposed annular end portions, each of said annular end portions defining a hole, one of said holes having a diameter greater than the diameter of the other of said holes;

a first coupler sealingly coupling ~~one~~ the end portion of the boot member having said larger diameter hole to the outer containment vessel around the access opening therein; and

a second coupler sealingly coupling the ~~other~~ end portion of the boot member having said smaller diameter hole adjacent to the conduit in spaced relationship from the first coupler,

the area of said access opening being greater than the cross-sectional area of that part of the conduit extending through said access opening,

whereby said boot member prevents leakage of liquid from the double walled containment tank that may collect in the containment area.

26. (Previously Presented) A discharge outlet as set forth in claim 25, wherein the boot member is sufficiently flexible to permit limited relative movement between the inner tank and the outer containment vessel.

27. (Previously Presented) A discharge outlet as set forth in claim 25, wherein said first coupler is annular and spaced radially outwardly of said conduit to permit limited relative movement between the conduit and the containment vessel.

28. (Previously Presented) A discharge outlet as set forth in claim 25, wherein said other opposed annular end portion of the boot member is sealingly coupled to the conduit adjacent the port in the side wall of the inner tank.

29. (Previously Presented) A discharge outlet as set forth in claim 25, wherein said second coupler sealingly couples said other end portion to said inner tank.

5 30. (Previously Presented) A discharge outlet as set forth in claim 25, wherein said boot member includes a circumferentially extending cup-shaped protrusion.

10 31. (Previously Presented) A discharge outlet as set forth in claim 30, wherein said cup-shaped protrusion has a maximum cross-sectional area greater than the area of the access opening.

32. (Previously Presented) A discharge outlet as set forth in claim 25, wherein said boot member is of a flexible synthetic resin material.

15 33. (Currently Amended) A discharge outlet as set forth in claim 25, said boot member having first and second outer end portions, wherein said ~~one~~ first outer end portion of the boot member has a unitary first annular wall, ~~an~~ a first annular gasket between the side wall portion of the outer containment vessel and the first annular wall of the boot member to prevent leakage of fluid from the containment area of the tank through said access opening of the containment vessel.

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within said containment area.

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